Amendments to the Claims

Please amend Claims 1, 3, and 4. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently Amended) A gas conversion system for removing NO_x and SO_x from gases comprising:

a duct having a cross section through which the gases flow, the duct having a port for introducing a reaction agent into the duct to the gases; and

first and second electron beam emitters each having a single exit window mounted to the duct over openings in the duct opposite from each other for directing opposed electron beams into the duct and causing components of the NO_x, SO_x and reaction agent to react to remove NO_x and SO_x from the gases, the duct being shaped and sized, and the electron beam emitters being configured and sized to generate electron beams that provide complete electron beam ~~converage~~ coverage across the cross section of the duct with generally evenly dispersed electrons.

2. (Original) The gas conversion system of Claim 1 in which the reaction agent is ammonia.

3. (Currently Amended) A treatment system for removing a compound comprising:

a duct having a cross section through which gases flow, said compound being mixed with the gases, the duct having a port for introducing a reaction agent into the duct to the gases; and

first and second electron beam emitters each having a single exit window mounted to the duct over openings in the duct opposite from each other for directing opposed electron beams into the duct and causing components of the compound and reaction agent to react to remove the compound from the gases, the duct being shaped and sized, and the electron beam emitters being configured and sized to generate electron beams that provide complete electron beam ~~converage~~ coverage across the cross section of the duct with generally evenly dispersed electrons.

4. (Currently Amended) An electron beam treatment system comprising:

a duct having a cross section through which a substance to be treated flows; and

first and second electron beam emitters each having a single exit window mounted to the duct over openings in the duct opposite from each other for directing opposed electron beams into the duct to treat the substance, the duct being shaped and sized, and the electron beam emitters being configured and sized to generate electron beams that provide complete electron beam ~~coverage~~ coverage across the cross section of the duct with generally evenly dispersed electrons.

5. (Previously Presented) The system of Claim 4 in which the substance includes volatile organic compounds.

6-23 (Cancelled)

24. (Previously Presented) The system of Claim 5 further comprising a reactive bed positioned within the duct.

25. (Previously Presented) The system of Claim 24 in which the reactive bed includes pellets of reactive materials.